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APPLICATION NO	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,016	04/20/2001	Yukihiro Kiuchi	NE+99P237A	9360

466 7590 06/04/2004

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EXAMINER	
SELLERS, ROBERT E	

ART UNIT	PAPER NUMBER
1712	

DATE MAILED: 06/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action	Application No.	Applicant(s)	
	09/830,016	KIUCHI ET AL.	
	Examiner	Art Unit	
	Robert Sellers	1712	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 24 May 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

a) ☒ The period for reply expires 3 months from the mailing date of the final rejection

b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.

2. ☒ The proposed amendment(s) will not be entered because:

   (a) ☒ they raise new issues that would require further consideration and/or search (see NOTE below);

   (b) ☒ they raise the issue of new matter (see Note below);

   (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

   (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____

3. ☐ Applicant's reply has overcome the following rejection(s): _____.

4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

5. ☒ The a)☐ affidavit, b)☐ exhibit, or c)☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: *See the attachment*

6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.

7. ☒ For purposes of Appeal, the proposed amendment(s) a)☒ will not be entered or b)☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

   The status of the claim(s) is (or will be) as follows:

   Claim(s) allowed: _____

   Claim(s) objected to: *37*

   Claim(s) rejected: *34-36*

   Claim(s) withdrawn from consideration: *26-33, 38, 44 and 45*

8. ☐ The drawing correction filed on _____ is a)☐ approved or b)☐ disapproved by the Examiner.

9. ☐ Note the attached Information Disclosure Statement(s)(PTO-1449) Paper No(s). _____.

10. ☐ Other: _____

Robert Sellers
Primary Examiner
Art Unit: 1712

1. The amendment after Final rejection filed May 24, 2004 has been denied entry. There is no support for the teraphenylolethane triglycidyl ether of formula (3') in withdrawn independent claim 26 and independent claim 34. The specification on page 25, formula (3) only depicts the claimed tetraphenylolethane tetraglycidyl ether of formula (3) wherein each of the phenolic hydroxyl groups are glycidated, as opposed to formula (3') containing one unreacted phenolic hydroxyl group. The specification on page 20, line 8 only enables the newly added species of glass inorganic filler in the form of fibers.

2. Takami et al. Patent No. 6,054,222 teaches mixtures of epoxy resins including biphenyl diglycidyl ether and epoxidized tetra(hydroxyphenyl)alkane. Shimizu et al. Patent No. 5,854,316 is relied upon as a secondary reference providing an impetus for combine the epoxidized tetra(hydroxyphenyl)alkane of Takami et al. with the biphenyl diglycidyl ether of Takami et al. in order to improve the moldability and solder heat resistance (Shimizu et al., col. 2, lines 50-63) as well as enhancing the reflow crack resistance as recognized in Takami et al.

3. According to MPEP § 2144 under the heading "RATIONALE DIFFERENT FROM APPLICANT'S IS PERMISSIBLE", "It is not necessary that the prior art suggest the combination to achieve the same advantage or result discovered by applicant (*In re Linter*, 173 USPQ 560, CCPA 1972; and *In re Dillon*, 16 USPQ2d 1897, 1901, "it is not necessary in order to establish a *prima facie* case of obviousness that . . . there be a suggestion in or expectation from the prior art that the claimed compound or composition will have the same or a similar utility as one newly discovered by applicant."). Although the motivation for using a mixture of biphenyl and tetraphenylolethane epoxy resins in Takami et al. in view of Shimizu et al. differs from that claimed, it does not negate the advantages disclosed in the references.

4. The combination of epoxidized tetra(hydroxyphenyl)alkane, and biphenyl epoxy resin within the realm of the biphenyl-containing epoxy resin of claim 34 as denoted in the amendment of July 29, 2003 (page 9, lines 6-8), as set forth in Takami et al. in view of Shimizu et al. inherently exhibits flame retardance. The burden of proof is not on the reference to provide experimental evidence of flame retardance, but is on applicants to establish unexpected flame retardance for a representative sampling of a single tetraphenylolethane epoxy resin or a mixture of two (withdrawn species claim 26), a blend of biphenyl epoxy resin and tetramethylbiphenyl epoxy resin (withdrawn species claim 33), and a combination of biphenyl epoxy resin and tetraphenylolethane epoxy resin (claim 34 as of the July 29, 2003 amendment).

The claimed blends should be compared to the closest prior art biphenyl epoxy resin shown in Examples I-1 to I-5 of Table 1 in column 14 of Takami et al. wherein the types and amounts of phenolic resin (B), filler (C) and curing accelerator (D) as well as any other additives are held constant to isolate the effect of the epoxy resin on the flame retardance.

5. Claim 37 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The closest prior art to Takami et al. does not recite the phenolbiphenylaralkyl epoxy resin of formula (2) defined in claim 37.

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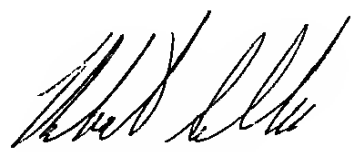

Robert Sellers
Primary Examiner
Art Unit 1712

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